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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,497	08/01/2001	Shinya Hondo	Q65530	3221

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

CORRIELUS, JEAN B

ART UNIT PAPER NUMBER

2637

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,497

Applicant(s)

HONDO, SHINYA

Examiner

Jean B. Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 6 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 4, line 3, the limitation "each of the paths" lacks of proper antecedent basis. The same comment applies to line 4 and claim 12, lines 3 and 4.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kosaka, US Patent No. 6,574,209.

Kosaka discloses a code division multiple access (CDMA) receiving apparatus fig. 2 for receiving data of a plurality of service types, i.e., image data and voice data,, which comprises a plurality of reception processing blocks, see elements (4-6) forming

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a first block and elements (7-9) forming a second block for carrying out reception processing for said data, wherein said data are allocated to said reception processing blocks, depending upon said service types, i.e., image data and voice data.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka.

As per claim 2, Kosaka, as applied to claim 1 above teaches every feature of the claimed invention but does not explicitly teach that the service types also includes packet data. However, modifying a CDMA receiver to process packet data is old and well established in the art. Given that, it would have been obvious to one skill in the art to configure Kosaka in such a way as to process packet data so as to be compatible with exiting technology that uses packet data format.

As per claim 5, it would have been obvious tone skill in the art to store data field of the high speed data in a memory, so as to avoid data lost. In addition, it would have been obvious to one skill in the art to demodulate the high speed data successively according to path information stored in the path memory so as to ensure that only the most likely data is demodulated in order to enhance system reliability.

As per claim 7, it would have been obvious to one skill in the art to demodulate the high speed data when a data field finger unit of reception processing block of said high speed data is vacant in order to avoid overlapping with current processing of data signal.

As per claim 8, it would have been obvious to one skill in the art to allocate low speed data to one of said reception processing blocks of which finger unit is vacant in order to avoid overlapping with current processing of data signal.

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka in view of Ito US Patent No. 6,408,039.

As per claim 1, Kosaka discloses every feature of the claimed invention but does not explicitly teach the further limitations wherein each of said reception processing blocks contains searcher means for finding out a reception timing of a CDMA signal having a high correlation value with respect to a pseudo random noise (PN) code in the received CDMA signal and said received CDMA signal is allocated to one of the reception processing blocks, depending upon a result of the search by said searcher means. In the same field of endeavor, Ito discloses a CDMA receiver fig.1 wherein each of a plurality of reception processing blocks 11-16 contains searcher means see fig. 1 for finding out a reception timing of a CDMA signal see col. 3, lines 34-40 having inherently a high correlation value with respect to a pseudo random noise (PN) code in the received CDMA signal and said received CDMA signal is assigned (allocated) to one of the reception processing blocks by signal assignment unit 17A, depending upon

a result of the search by said searcher means see fig. 1. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Kosaka in order to combine useful multipath s components of a spread spectrum signal so that the original signal can be effectively recovered.

As per claim 4, Ito teaches that the voice and low speed are demodulated so as to output a detection signal for each of the paths and carry out rake combining in combiner 18 for combining the detection signal of each path see fig. 1. Note that the voice data and the low speed data inherently include a data field and a control field. Given that fact it would have been obvious to incorporate such a teaching in Kosado and the reasons to do so would have been the same as provided in reference to claim 3.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka in view of Ito US Patent No. 6,408,039.

Kosaka discloses a code division multiple access (CDMA) receiving apparatus fig. 2 for receiving data of a plurality of service types, i.e., image data and voice data, which comprises a plurality of reception processing blocks, see elements (4-6) forming a first block and elements (7-9) forming a second block for carrying out reception processing for said data, wherein said data are allocated to said reception processing blocks, depending upon said service types, i.e., image data and voice data. However, Kosaka fails to teach that the CDMA signal is stored. However, Sorting a CDMA signal

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is old and well established in the art. Given that, it would have been obvious to one skill in the art to store the CDMA signal in order to avoid data lost.

9. Claims 10, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka.

As per claim 10, Kosaka, as applied to claim 9 above teaches every feature of the claimed invention but does not explicitly teach that the service types also includes packet data. However, modifying a CDMA receiver to process packet data is old and well established in the art. Given that, it would have been obvious to one skill in the art to configure Kosaka in such a way as to process packet data so as to be compatible with exiting technology that uses packet data format.

As per claim 13, it would have been obvious tone skill in the art to store data field of the high speed data in a memory, so as to avoid data lost. In addition, it would have been obvious to one skill in the art to demodulate the high speed data successively according to path information stored in the path memory so as to ensure that only the most likely data is demodulated in order to enhance system reliability.

As per claim 15, it would have been obvious to one skill in the art to demodulate the high speed data when a data field finger unit of reception processing block of said high speed data is vacant in order to avoid overlapping with current processing of data signal.

As per claim 16, it would have been obvious to one skill in the art to allocate low speed data to one of said reception processing blocks of which finger unit is vacant in order to avoid overlapping with current processing of data signal.

10. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka in view of Ito US Patent No. 6,408,039.

As per claim 9, Kosaka discloses every feature of the claimed invention but does not explicitly teach the further limitations wherein each of said reception processing blocks contains searcher means for finding out a reception timing of a CDMA signal having a high correlation value with respect to a pseudo random noise (PN) code in the received CDMA signal and said received CDMA signal is allocated to one of the reception processing blocks, depending upon a result of the search by said searcher means. In the same field of endeavor, Ito discloses a CDMA receiver fig.1 wherein each of a plurality of reception processing blocks 11-16 contains searcher means see fig. 1 for finding out a reception timing of a CDMA signal see col. 3, lines 34-40 having inherently a high correlation value with respect to a pseudo random noise (PN) code in the received CDMA signal and said received CDMA signal is assigned (allocated) to one of the reception processing blocks by signal assignment unit 17A, depending upon a result of the search by said searcher means see fig. 1. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Kosaka in order to combine useful multipath s components of a spread spectrum signal so that the original signal can be effectively recovered.

As per claim 12, Ito teaches that the voice and low speed are demodulated so as to output a detection signal for each of the paths and carry out rake combining in combiner 18 for combining the detection signal of each path see fig. 1. Note that the voice data and the low speed data inherently include a data field and a control field. Given that fact it would have been obvious to incorporate such a teaching in Kosado and the reasons to do so would have been the same as provided in reference to claim 11.

Allowable Subject Matter

11. Claims 6 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments


12. Applicant's arguments, see pages 7-13, filed 4/25/05, with respect to the rejection(s) of claim(s) 1-16 under Iwakiri and the 112 rejection of claim s 4 and 12 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kosaka and Ito.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean B Corrieus
Primary Examiner
Art Unit 2637

7/22/05

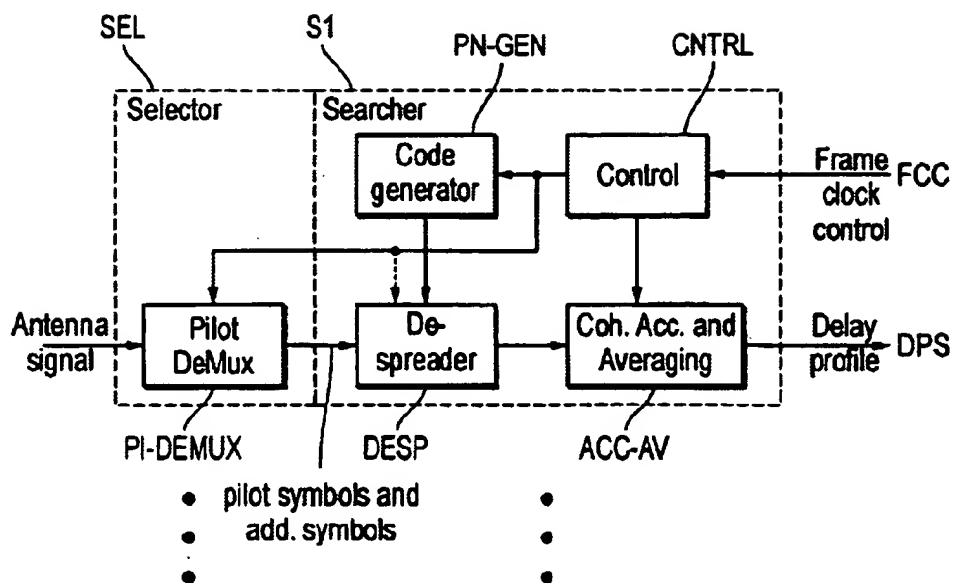


FIG. 7

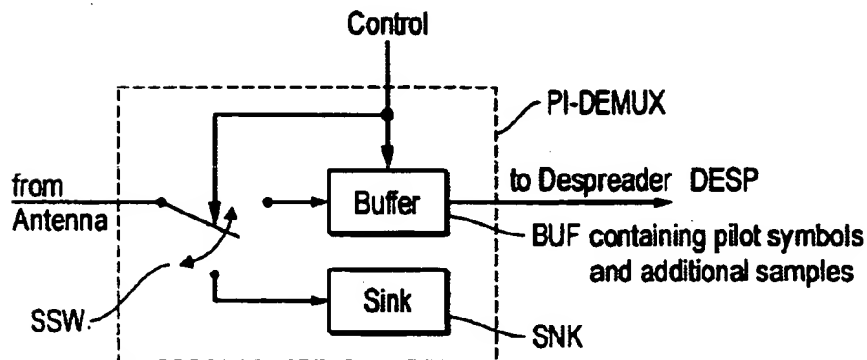


FIG. 8